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PHONY PEACH, A VIRUS DISEASE OF PEACH
PRUNUS PERSICA (L.) BATSCH.

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Phony peach has been reported from Florida on several occasions, but its distribution in Florida is not known.

The first known observation of phony was made on two peach trees at Marshallville, Georgia, about 1885. This virus disease has been found in all the south Atlantic states below Virginia; in all the Gulf States; in Tennessee and Arkansas; in a few locations in southern parts of Oklahoma, Missouri, and Illinois; and in Indiana, Kentucky, Maryland, and Pennsylvania. However, the disease has been reportedly eradicated from these last four states as well as from North Carolina, Oklahoma and Illinois.

Phony is first in importance among virus diseases of peach in Georgia and some other southern states. Since its first appearance in the United States, phony has ruined more than 2,600,000 peach trees.

SYMPTOMS

The symptoms of phony are most striking when the trees are in full foliage and in good vigor. With the onset of symptoms, the phony tree develops shortened inter-nodes, rather profuse lateral branches, and flattened, dark green leaves, giving the appearance of compact, dense growth with luxuriant foliage. Decided dwarfing of new growth results, and the periphery of the upper crown tends to take on a uniform, rounded appearance. See Figure 5, reproduced from U. S. Department of Agriculture Handbook 10, "Virus Diseases and Other Disorders with Viruslike Symptoms of Stone Fruits in North America," page 19. Phony trees may live many years. However, after several years of the disease, the wood appears brittle, and there may be a notable dying back of the terminal twigs and branches. Vigorous new growth cannot be forced. As large limbs die or are broken, the tree takes on a ragged appearance. Even on such trees the foliage tends to be characteristic of the disease; that is, it is greener and flatter than that of normal trees. In the spring phony trees flower and leaf out earlier than normal ones of the same variety, and they hold their foliage later in the fall.

The fruits on phony trees are well formed and ripen a few days earlier than normal fruits, though reduced both in size and number per tree. They may be somewhat poorer in flavor than normal fruits, but they are generally more highly colored.

Four species of Cicadellidae have been reported as vectors of phony under experimental conditions. These species are Homalodisca triquetra (F.), Oncometopia undata (F.), Graphocephala versuta (Say), and Cuerna costalis (F.).

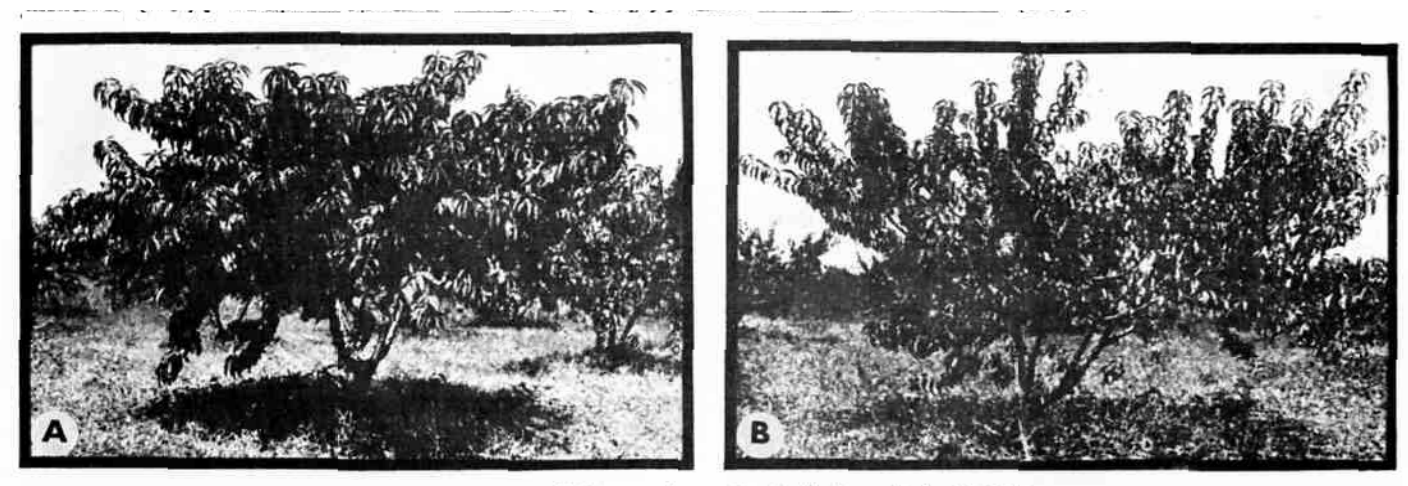

Figure 5. – *A*, Six-year old Elberta peach tree affected with phony, showing the dense shadow cast by the healthy appressed foliage, Fort Valley, Ga. *B*, Comparable normal tree in same orchard.